

or in Lundahl, et al. in view of Van Eecke, et al. (U.S. Patent No. 4,955,774) and Vellidus, et al. and Hale, et al.

In making a *Graham v. John Deere* obviousness inquiry, the Examiner needs to consider:

- (1) the scope and content of the prior art;
- (2) the differences between the claimed invention and the prior art;
- (3) the level of ordinary skill in the pertinent art; and
- (4) objective evidence relevant to the issue of obviousness.

An Examiner's rejection on obviousness grounds cannot be based on conclusory statements, rather they must be based on an articulated reason with some rationale underpinning to support the legal conclusion of obviousness. The Examiner must a sufficient reason or explicit analysis of why the disclosures of the references should be combined. For example, the Examiner may identify some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention, without using the claimed invention as a template for a hindsight reconstruction analysis.

The applicant hereby traverses the examiner's rejection based on the examiner's factual findings for failing to provide sufficient reason or explicit analysis of why the disclosures of the references should be combined. The applicant submits that the examiner has failed to describe each of the following:

- (1) the scope and content of the prior art;
- (2) the differences between the claimed invention and the prior art;
- (3) the level of ordinary skill in the pertinent art; and
- (4) objective evidence relevant to the issue of obviousness.

The present application teaches on page 1, lines 22-31: "An agricultural baler ("baler") is a widely used piece of mobile equipment which collects and compresses the crop material as it travels over the ground to produce a compact unit of crop, commonly referred to as a bale. The baler may comprise a motorized machine driven by an operator or, alternatively, may comprise a wheeled frame adapted for traveling alongside or behind a tractor. Typically, a baler is a wheeled chassis adapted for hitched connection to a tractor to be towed in tandem behind the tractor. After the baler forms a bale, a cord, such as wire or twine, is tied around the bale to hold the bale together in its compressed form. The baler ejects the tied bales periodically from a bale chamber of a baler as the baler travels over the ground. Each ejected bale may be directly discharged either to a bale accumulator or to the ground for later pick up by a bale collector in order to make the harvesting of the crop material more efficient and to decrease manual labor. Bales provided by either the bale accumulator or the bale collector may then be deposited on a vehicle, such as a tractor trailer, for hauling to another location for storage." (herein referred to as the "Applicant's disclosed baler")

Lundahl, et al teaches: “A hay baler including a trailer frame with a hitch for attachment to a prime mover and support wheels. A crop pick-up unit moves cut crop into a material storage area, from where it is moved into a bale chamber and is compacted by a compression unit and tied with twine before being discharged to ground from the rear of the trailer frame.” (Abstract)

Van Eecke, et al. teaches: “Agricultural balers are in common use and operate to pick-up and compress crop material, such as hay, straw, etc., into bales and wrap completed bales with wire or twine. Wrapped bales are ejected periodically from the bale chamber of a baler as the latter travels over the field and each bale, on being ejected, normally is discharged directly to the ground.

In order to make the overall baling and bale hauling operation more efficient, it has already been proposed to provide a bale accumulator which is arranged to receive successive bales as they are discharged from a baler and to accumulate the bales into a group or parcel and then discharge the parcel to the ground.” (col. 1, lines 23-34)

Vellidus, et al. teaches: “a crop yield monitoring system and method which can be used during harvesting of a crop, such as peanuts, pecans, Vidalia onions, and others, which are transported into a collection basket in order that crop yield can be determined based on measuring mass changes of the collection basket. The invention provides crop yield mapping data for evaluating crop yield at locations in a site-specific farming area.” (col. 4, lines 16-23) “The peanut pods are removed from the plant vines.” (col. 5, line 27) An air delivery system conveys the peanut pods to the storage or collection basket 40 disposed on the top of the combine. (col. 5, lines 42-44)

Vellidus, et al. includes only one reference to a “baler” in col. 1, lines 42-45, which does not relate to controlling the baler based on its location in a field, and which describes signal noise remaining a severe limitation to forage yield monitoring.

Hale, et al. teaches “a field mapping system for an agricultural vehicle, such as a combine, planter or cultivator.”

In summary of the cited references, Van Eecke, et al. and the Applicant’s disclosure each teach a baler and a bale accumulator. Lundahl, et al teaches “a hay baler.” Hale, et al. teaches “a field mapping system for an agricultural vehicle, such as a combine, planter or cultivator.” Vellidus, et al. teaches “a crop yield monitoring system and method which can be used during harvesting of a crop, such as peanuts, pecans, Vidalia onions ...” using a combine.

The Applicant has amended claims 1 and 26 to claim at least: “a controller adapted to generate a control signal to control an operation of the agricultural bale accumulator in response to receiving a location signal, representative of a location of the agricultural bale accumulator in an agricultural field, to cause the agricultural bale accumulator to perform the operation in response to the location of the agricultural bale accumulator in an agricultural field.” The present amendment further defines the operation of the controller to distinguish the amended claims over the cited references. Therefore, the Applicant respectfully submits that the teachings Van Eecke, et al. and Hale, et al. and Vellidus, et al. in combination with the teaching of the Applicant’s disclosed baler or

Lundahl, et al is not the same as and/or does not render obvious the claimed invention, for at least the following reasons.

There is no basis in one or more of the four cited references for modifying one or more of the four cited references to meet the claimed limitations of: “a controller adapted to generate a control signal to control an operation of the agricultural bale accumulator in response to receiving a location signal, representative of a location of the agricultural bale accumulator in an agricultural field, to cause the agricultural bale accumulator to perform the operation in response to the location of the agricultural bale accumulator in an agricultural field.”

Neither Hale, et al. nor Vellidus, et al. teaches or suggests the claimed “agricultural bales of crop material.” Therefore, Hale, et al. or Vellidus, et al. is not properly modifiable by either the Applicant’s disclosed baler or Lundahl, et al teaching of “a hay bale” when its intended function is destroyed because of the difference in the crop material among the cited references.

Neither Hale, et al. nor Vellidus, et al. teaches or suggests the claimed “an agricultural bale accumulator adapted to receive agricultural bales of crop material.” Therefore, Hale, et al. or Vellidus, et al. is not properly modifiable by either the Applicant’s disclosed baler or Lundahl, et al teaching of “a hay baler for producing hay bales” when its intended function is destroyed because of the difference in transporting the crop material among the cited references.

Neither Hale, et al. nor Vellidus, et al. teaches or suggests the claimed: “crop material formed by and ejected from an agricultural baler.” Therefore, Hale, et al. or Vellidus, et al. is not properly modifiable by either the Applicant’s disclosed baler or Lundahl, et al teaching of “a hay baler for producing hay bales” when its intended function is destroyed because of the difference in machinery forming and handling the crop material.

Nowhere does Hale, et al., Vellidus, et al., the Applicant’s disclosed baler or Lundahl, et al, either alone or in combination, teach or suggest the use of site-specific farming (e.g., GPS) in combination with “an agricultural bale accumulator” and “agricultural bales of crop material,” as claimed. There is no basis in one or more of the cited references for combining the teachings of the cited references or modifying the four cited references to meet the claimed limitations.

Nowhere does Hale, et al., Vellidus, et al., the Applicant’s disclosed baler or Lundahl, et al, either alone or in combination, teach or suggest the problems or the problems’ source, associated with the claimed “agricultural bale accumulator” and “agricultural bales of crop material.” Therefore, teachings of the cited references, either alone or in combination, cannot provide a solution to the problems associated with the claimed “agricultural bale accumulator.”

The cited references, in combination, teach away from the claimed limitations of the “a controller adapted to generate a control signal to control an operation of the agricultural bale accumulator in response to receiving a location signal, representative of a location of the agricultural bale accumulator in an agricultural field, to cause the agricultural bale accumulator to perform the operation in response to the location of the agricultural bale accumulator in an agricultural field”

because Hale, et al. and Vellidus, et al. each teach a different machine, a different way to control the machine, a different crop material, a different way to harvest the different crop material, and a different way to transport the different crop material.

The Examiner's asserts that "it would be obvious to replace the controls in the known baler system or in Lundahl with controls as claimed in view of the automatic controls in Vellius and Hale since it would involve only routine skill to replace manual means with mechanical means or automatic means which accomplish the same result." The Examiner's proposed combination suggests more than merely replacing manual mean with mechanical means or automatic means to accomplish the same result for at least the following reasons:

- 1) There is no teaching or suggestion in Van Eecke, et al., the Applicant's conventional disclosure, or Lundahl, et al for: "a controller adapted to generate a control signal to control an operation of the agricultural bale accumulator in response to receiving a location signal, representative of a location of the agricultural bale accumulator in an agricultural field, to cause the agricultural bale accumulator to perform the operation in response to the location of the agricultural bale accumulator in an agricultural field," as claimed.
- 2) There is no teaching or suggestion in either Vellidus, et al. or Hale et al for: "a controller adapted to generate a control signal to control an operation of the agricultural bale accumulator in response to receiving a location signal, representative of a location of the agricultural bale accumulator in an agricultural field, to cause the agricultural bale accumulator to perform the operation in response to the location of the agricultural bale accumulator in an agricultural field," as claimed.
- 3) Hale, et al. and Vellidus, et al. each teach a different machine, a different way to control the machine, a different crop material, a different way to harvest the different crop material, and a different way to transport the different crop material than what is disclosed in Van Eecke, et al., the Applicant's conventional disclosure, and/or Lundahl, et al. Therefore, the Examiner's assertion of accomplishing the "same result" is not physically possible.
- 4) The claimed combination does more than replace manual means with mechanical means or automatic means by providing new structure, function, and associated advantages not found in the cited prior art, either alone or in combination.
- 5) The Examiner's general assertion that the control systems of Vellidus, et al. and Hale can be combined with the agricultural bale accumulator disclosed in the Applicant's conventional disclosure or in Lundahl, et al to render the present invention obvious is overly broad and without support.

For at least these reasons, the cited references, either alone or in combination, require more than "replacing manual means with mechanical or automatic means to accomplish the same results," as achieved by the present independent claims 1 and 26, for example.

Further, dependent claims 2-25 and dependent claims 27-35 include additional limitations that further define the present invention to further distinguish over the cited references. For example, none of the disclosed references teach or suggest: counting one or more of the agricultural bales (claim 2), determining a size of one or more of the agricultural bales (claim 3), determining a moisture content of one or more of the agricultural bales (claim 4), determining a weight of one or more of the agricultural bales (claim 5), determining a location of one or more of the agricultural bales discharged in the agricultural field from the load bed (claim 6), determining a distance traveled in the agricultural field by the agricultural bale accumulator (claim 7), determining a path traveled in the agricultural field by the agricultural bale accumulator (claim 8), determining a contour of the agricultural field traveled by the agricultural bale accumulator (claim 9), and determining a size of the agricultural field traveled by the agricultural bale accumulator (claim 10).

Secondary evidence supporting non-obviousness includes the following. (1) The claimed invention provides long felt but unsolved needs for an improved agricultural bale accumulator advantageously providing increased bale accumulating capacity, and/or intelligent bale accumulation and bale discharge operations to permit efficient, flexible, and desirable harvesting of hay and forage crop material. (2) Others have failed to recognize a need for an improved agricultural bale accumulator, and have failed to provide the claimed invention for an agricultural bale accumulator.

For at least these reasons, the present independent claims 1 and 26 are patentable over the four cited references, either alone or in combination. Therefore, the applicant respectfully request that the examiner's rejection of claims 1-15 and 17-30, under 35 USC 103(a) as being unpatentable over the Applicant's disclosed baler, or newly cited Lundahl, et al in view of Van Eecke, et al. and Vellidus, et al. and Hale, et al., be withdrawn.

3. The examiner objected to claims 16 and 31-35 for being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The applicant appreciates the examiner's indication of allowable claims.

4. The applicant respectfully submits that claims 1-35 describe an improved agricultural bale accumulator advantageously providing increased bale accumulating capacity, and/or intelligent bale accumulation and bale discharge operations to permit efficient, flexible, and desirable harvesting of hay and forage crop material. The features of the claimed agricultural bale accumulator and/or its associated advantages are not taught or suggested by the references of record, either alone or in combination.

5. The applicant respectfully submits that no new matter has been added to the claims.

6. In view of the foregoing, Applicant submits that all pending claims are in condition for allowance. Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the phone number provided below.

7. The applicants submit herewith a petition under 37 CFR 1.136 for a three month extension of time with an associated fee. This request and amendment is filed on March 17, 2008, under the Certificate of Mailing pursuant to 37 CFR 1.18, within the three month shortened statutory period set for reply in the Final rejection dated September 17, 1007 plus a three month extension of time under 37 CFR 1.136(a), which expires March 17, 2008, pursuant to MPEP 710.01(a).

8. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,
Kaschke, et al.

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By: Kevin D. Kaschke
Kevin D. Kaschke
Applicant/Inventor
Registration No. 35,767
Phone: (630) 377-6759
Fax: (630) 377-6795